East Part of Main Gilt Edge

Work on the east part of the main Gilt Edge area included sampling a soil grid in an area of poor rock exposure and collecting rock samples. The East Gilt Edge soil grid is on the east slope of Hot Springs Ridge, south and east of the Ora Bella adit (plate 1). Previous workers mapped the area as principally trachyte porphyry on the basis of float. Eleven samples 100 ft apart were collected on the N35°E trending baseline. At 200 ft intervals along the baseline, perpendicular lines were run and samples were collected 100 ft apart. Thirty-four samples were collected on the initial grid. One sample, A10+00, is anomalously high (7175 ppb Au) and is probably contaminated from old diggings. Therefore, it was not included in the statistical manipulation of the data. Gold values of the soil samples range from 20 to 1295 ppb. Correlation coefficients (table 1) and contour plots show little relationship between the gold values and the values for silver, mercury, arsenic, lead, and copper. Geochemical results for antimony, bismuth, and tellurium were generally below or marginally above the detection limits for those elements.

Fifty-five fill-in samples were collected at 50 ft spacing to further define the anomalous areas. These samples were analyzed only for gold and silver; values are listed in Table 2. The strongest gold anomaly was west of the baseline on line A5 where four of the five samples are greater than the threshold value (mean plus two standard deviations) and the other sample was greater than the mean plus one standard deviation. A contour map of the gold data shows a westerly trend of the anomalous zone (fig. 1). Reverse circulation hole RGE 84-8 was drilled to test this anomaly. Cuttings from the hole had a mean of 0.020 ounces per ton gold and a 140 ft interval averaged 0.029. The rock in the hole is unoxidized and has up to 10% disseminated pyrite cubes.

Twenty-six rock samples were collected on the eastern part of the main Gilt Edge area (plate 1). Six of these samples are from within the East Gilt Edge soil grid. Several of the samples have anomalous gold values (table 3), and enrichment of gold is evident in a variety of rock types. The rock samples from the soil grid average 0.028 oz/ton gold. Most of these samples were trachyte porphyry collected from the rubble in small pits and trenches. Rock samples appear to show little correlation to soil sample values. All five samples from the previously worked gully east of the Ora Bella are anomalous with an average of 0.035 oz/ton gold. Lithologies of these samples include trachyte porphyry, hornblende diorite(?), shale, schist, and quartzite. Additional sampling is necessary to determine the significance of this anomalous area.

Table 1

SOIL SAMPLE GEOSTATISTICS

East Gilt Edge Soil Grid

Au (ppb) MEANS AND STANDARD DEVIATIONS

Number of Samples	Mean	Std. Dev.	Mean + 2 Std. Dev.
88	221	280	781

CORRELATION COEFFICIENTS

Elements	Initial 33 Samples	Fill in Samples	Entire Grid
Au, Ag	0.412	-0.094	0.090
Au, Hg	0.401		
Au, As	0.118		
Au, Pb	0.070		
Au, Cu	0.040		

Anchor Hill Soil Grid

Number of samples:	41
Au (ppb) mean:	88
Standard Deviation:	128
Mean + 2 Std. Dev.:	343

CORRELATION COEFFICIENT (Au, Ag): 0.392

Table 2

EAST GILT EDGE SOIL SAMPLES

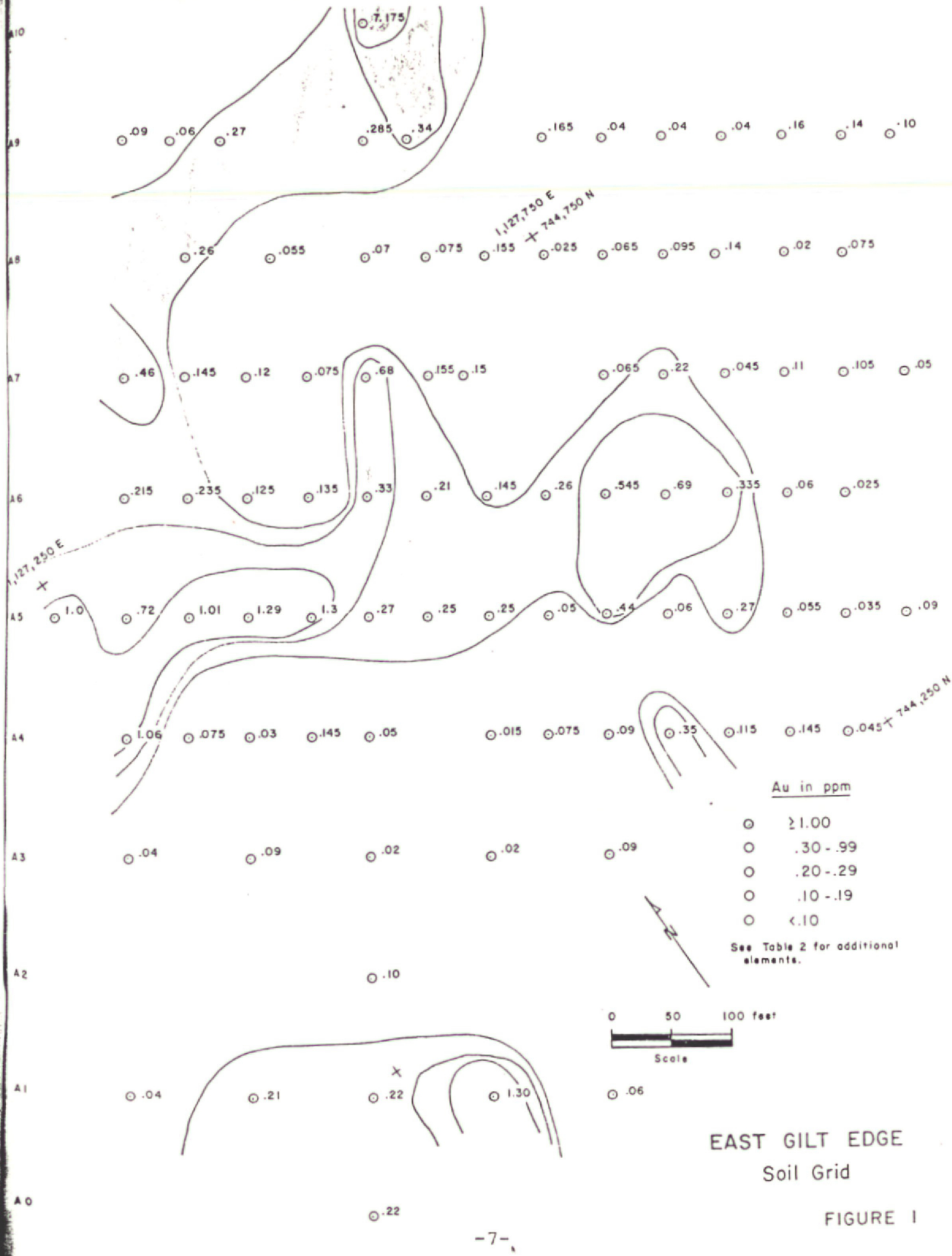
Sample Number	ELEMENT UNITS	Cu PPM	Pb PPM	Ag PPM	Au PPB	Bi PPM	As PPM	Hg PPB	Te PPM	Sb PPM
A0+00		47	96	1.7	215	8	85	45	1.2	<2
A1+00		39	53	0.9	220	1	45	45	0.6	<2
A1+100E		48	192	3.8	1295	21	70	75	1.0	<2
A1+200E		55	56	1.3	55	<1	44	30	0.8	<2
A1+100W		73	132	1.4	205	7	78	65	1.0	<2
A1+200W		14	68	0.2	35	<1	26	60	0.2	<2
A2+00		19	67	0.4	100	<1	53	95	0.6	<2
A3+00		10	59	0.4	20	<1	27	25	0.2	<2
A3+100E		12	33	0.5	20	<1	22	25	0.4	<2
A3+200E		58	81	0.8	85	6	61	25	0.6	<2
A3+100W		15	45	0.3	85	<1	55	45	0.2	<2
A3+200W		21	57	0.2	40	<1	62	35	0.8	<2
A4+00		9	33	0.2	50	2	33	50	0.2	<2
A5+00		11	22	0.3	265	2	31	45	<0.2	<2
A5+100E		88	225	2.8	250	5	185	70	1.8	<2
A5+200E		63	61	1.1	440	14	70	65	1.2	<2
A5+100W		7	18	0.2	1290	4	54	60	0.2	<2
A5+200W		9	15	0.6	715	2	26	70	0.6	<2
A6+00		9	14	0.4	330	2	22	80	<0.2	<2
A7+00		7	29	0.3	680	<1	28	85	<0.2	<2
A7+80E		13	25	0.5	145	<1	23	30	<0.2	2
A7+200E		11	25	0.6	65	<1	25	30	<0.2	<2
A7+300E		12	51	0.6	45	<1	31	45	<0.2	2
A7+400E		13	30	0.3	105	<1	32	45	<0.2	<2
A7+100W		10	28	0.3	120	1	21	45	<0.2	<2
A7+200W		23	46	0.3	455	3	54	45	<0.2	<2
A8+00		20	235	0.5	70	<1	75	50	<0.2	<2
A9+00		19	69	0.6	285	5	90	60	0.2	<2
A9+200E		23	19	<0.2	35	1	26	65	0.2	<2
A9+300E		21	18	<0.2	40	<1	22	65	0.2	<2
A9+400E		19	61	0.6	140	2	55	65	0.2	<2
A9+120W		20	276	1.4	270	4	90	65	0.2	<2
A9+200W		27	176	0.5	85	2	52	75	<0.2	<2
A10+00		72	261	9.6	7175	24	255	1550	0.2	<2
A4+100E				0.5	15					
A4+150E				0.6	75					
A4+200E				1.5	90					
A4+250E				0.9	350					
A4+300E				0.9	115					

Table 2
EAST GILT EDGE SOIL SAMPLES
Page 2

Sample Number	ELEMENT UNITS	Cu PPM	Pb PPM	Ag PPM	Au PPB	Bi PPM	As PPM	Hg PPB	Te PPM	Sb PPM
A4+350E				1.5	145					
A4+400E				0.9	45					
A4+50W				0.2	145					
A4+100W				0.2	30					
A4+150W				0.7	75					
A4+200W				0.5	1160					
A5+50E				5.5	250					
A5+150E				0.7	50					
A5+250E				4.1	60					
A5+300E				1.8	270					
A5+350E				1.3	55					
A5+400E				0.7	35					
A5+450E				4.0	90					
A5+50W				0.4	885					
A5+150W				0.4	1010					
A5+260W				0.3	1000					
A6+50E				0.9	205					
A6+100E				0.4	145					
A6+150E				0.6	260					
A6+200E				0.4	545					
A6+250E				0.6	400					
A6+300E				1.3	335					
A6+350E				0.8	60					
A6+400E				0.7	25					
A6+50W				0.7	135					
A6+100W				0.8	125					
A6+150W				0.6	235					
A6+200W				1.2	215					
A7+50E				0.4	155					
A7+250E				0.5	220					
A7+350E				0.6	110					
A7+450E				0.9	50					
A7+50W				0.4	75					
A7+150W				0.7	145					
A8+50E				0.5	75					
A8+100E				0.6	155					
A8+150E				0.2	25					
A8+200E				0.3	65					
A8+250E				0.5	95					
A8+295E				0.5	140					

Table 2
EAST GILT EDGE SOIL SAMPLES
Page 3

Sample Number	ELEMENT UNITS	Cu PPM	Pb PPM	Ag PPM	Au PPB	Bi PPM	As PPM	Hg PPB	Te PPM	Sb PPM
A8+350E				0.3	20					
A8+400E				0.4	75					
A8+80W				0.7	55					
A8+150W				0.5	260					
A9+35E				0.5	340					
A9+150E				0.5	165					
A9+250E				0.3	40					
A9+350E				0.5	160					
A9+440E				0.6	100					
A9+160W				0.6	60					



EAST GILT EDGE
Soil Grid

FIGURE 1

Table 3

ROCK SAMPLES FROM EASTERN PART OF MAIN GILT EDGE AREA

Sample #	Strawberry Hill Assay (oz/ton) Au	Ag	Boudar-Clegg Assay (oz/ton) Au	Ag	ROCK TYPE	KIND OF SAMPLE
1860	.020	NF	.010	.08	Tsrp	10' chip
1861	.025	NF	.017	.24	Ꞓdq	8' subcrop
1862	.020	NF	.027	.11	Ꞓdq	10' subcrop
1863	.010	NF			Tsrp	10' trench rubble
1864	.020	NF	.012	.03	Tsrp	10' trench rubble
1865	.005	NF			Tsrp	10' subcrop/rubble
1866	.010	NF			Tsrp	10' subcrop/rubble
1867	.005	NF			pꞒ	10' chip
1868	.010	NF			Ttp	6' rubble
1869	.020	.790	.024	1.04	Ttp?	dump grab
1893	.030	.150	.036	.22	Ttp	8' chip
1894	NF	tr			Ttp	6' chip
1895	.010	.185			Ttp	10' chip
1896	.025	.035	.016	.30	Thl+Ttp?	10' subcrop
1897	.030	.240	.037	.36	Ttp	chip
1898	.025	.95	.012	.15	Ttp	7' chip
1899	.040	.205	.024	.34	Ꞓd	10' rubble composite
1900	.035	.680	.043	.66	bxa	8' chip
1901	.050	.035	.066	.08	pꞒ	10' chip
1926	.020	NF			Ꞓdq+Ttp	4' subcrop
1927	.010	.510			Ttp	4' chip
1928	.085	NF			Ttp	8' rubble composite
1929	.025	NF			Ttp	rubble composite
1930	.030	.105			Ttp	rubble composite
1931	.005	NF			Ttp	dump composite

Explanation

NF - none found
tr - trace
bxa - breccia
Tr - Tertiary rhyolite
Ttp - Tertiary trachyte porphyry
Tsrp - Tertiary sanidine rhyolite porphyry
Thl - Tertiary hornblende latite
Thd - Tertiary hornblende diorite
Ꞓd - Cambrian Deadwood, q=quartzite, s=shale
pꞒ - preCambrian metamorphics

Union Hill

The Union Hill shaft is 1000 ft north of the old Sunday Pit at the north contact of the North Stock. The sanidine rhyolite porphyry intrusive is in contact with the trachyte porphyry, quartzite of the Deadwood Formation, and a thin zone of highly altered and bleached porphyritic volcanic rock (fig. 2). The altered rock is probably a dike of hornblende diorite porphyry. The shaft is caved and forms a nearly vertical-sided pit 50 ft in diameter. The original depth and the grades of mineralization encountered in the shaft are not known. Six vertical reverse circulation holes were drilled by AMOCO and Lacana in previous years in the area shown on Figure 2, and several of the holes had significant mineralized intercepts (table 4).

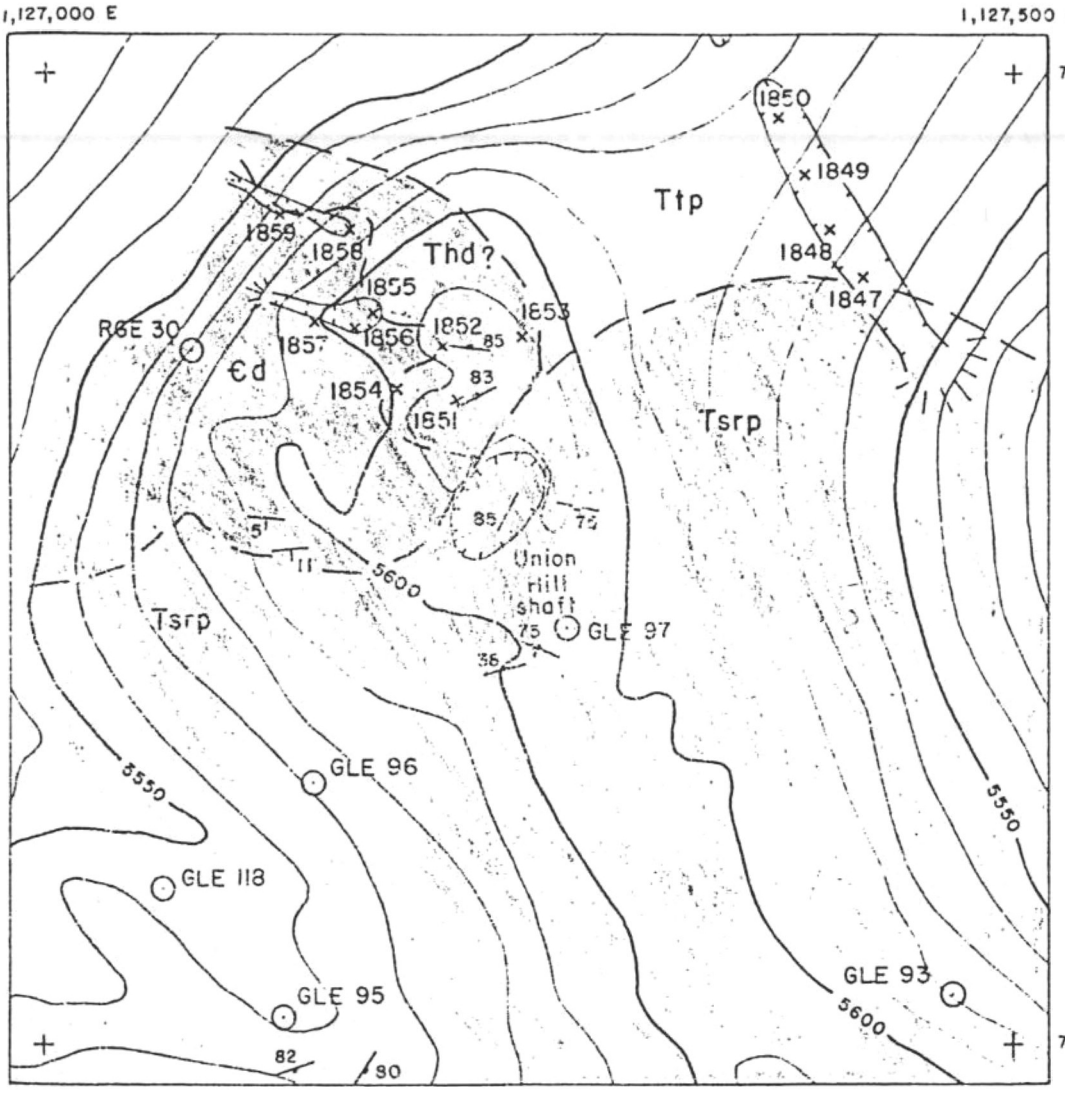
Thirteen rock samples were collected from the pits, trenches, and outcrops near Union Hill during the 1984 program. Six of the samples had anomalous gold values as shown on Table 5. Sampling distribution favored the quartzite and the hornblende diorite(?) due to the limited outcrop exposure. The trachyte is unmineralized where sampled.

East Gilt Edge - Upper Ruby Gulch

The ridge crest between Butcher Gulch and Ruby Gulch was traversed easterly from the main Gilt Edge property for two-thirds of a mile (fig. 3). Some of this land, the Borsch and Herbert claims, is controlled by Lacana, but Louis Eilers (M.S. 1561) and Ruth Hankins (M.S. 1905) also own ground in the area. Numerous old workings were discovered on their land and samples from their properties had the best values.

Tertiary-age intrusives form the ridge. The principal rock type is hornblende latite unit. The term "latite" was used as a descriptive field term rather than "diorite" because of the aphanitic groundmass. The rock is commonly fractured and iron-stained and in places it is bleached. The trachyte porphyry is typical of the Gilt Edge area. Minor quartz was noted in some samples. The Deadwood Formation occurs as small roof pendants or faulted wedges, also it is exposed in low saddles and in the Ruby Gulch drainage. The eastern portion of the area is covered by an unaltered white rhyolite. Some of the rhyolite has distinct phenocrysts of biotite. The structure of the area is not well understood, but it appears to be a primary control for mineralization. Attitudes of joints and shears were measured; this data needs to be incorporated into Mukherjee's (1968, unpublished Phd dissertation, Colorado School of Mines) work to understand the tectonics of the region.

Samples 1805-15 were collected on the southeast-trending ridge spur that runs from the center of section 5 down to Ruby Gulch (table 6). A considerable amount of work has been done on this ridge by early workers. Two shafts are open to depths



Anomalous rock samples	oz/ton Au (averaged)
1852	.027
1853	.013
1854	.032
1856	.032
1857	.014
1858	.022

See Table 5 for additional sample values.

EXPLANATION

- Tsrp — Sanidine rhyolite porphyry
- Ttp — Trachyte porphyry
- Thd? — Hornblende diorite? - strongly altered
- Ed — Deadwood Fm.
- Approximate contact
- 38 — Strike and dip of joint
- 5 — Strike and dip of bed
- Trench
- x 1851 — Rock sample location
- Drill hole location

0 50 100 feet
Scale

N

FIGURE 2

LACANA

GILT EDGE INC.

GEOLOGIC MAP
showing
ROCK SAMPLE LOCATIONS
UNION HILL AREA

Date: April 1985	Data by: LGI, CHC	Drawn by: PYC

Table 4

UNION HILL DRILL HOLES

Hole #	Interval	Thickness	$\bar{x}$ Au (oz/ton)	Type
GLE 95	39-179	140'	0.119	oxide
	179-199	20	0.037	sulfide
GLE 97	2- 42	40	0.023	oxide
	42- 62	20	0.025	mixed
	202-242	40	0.034	sulfide
GLE 118	101-121	20	0.023	oxide
RGE 30	0- 74	74	0.021	sulfide
	174-405	231	0.049	sulfide

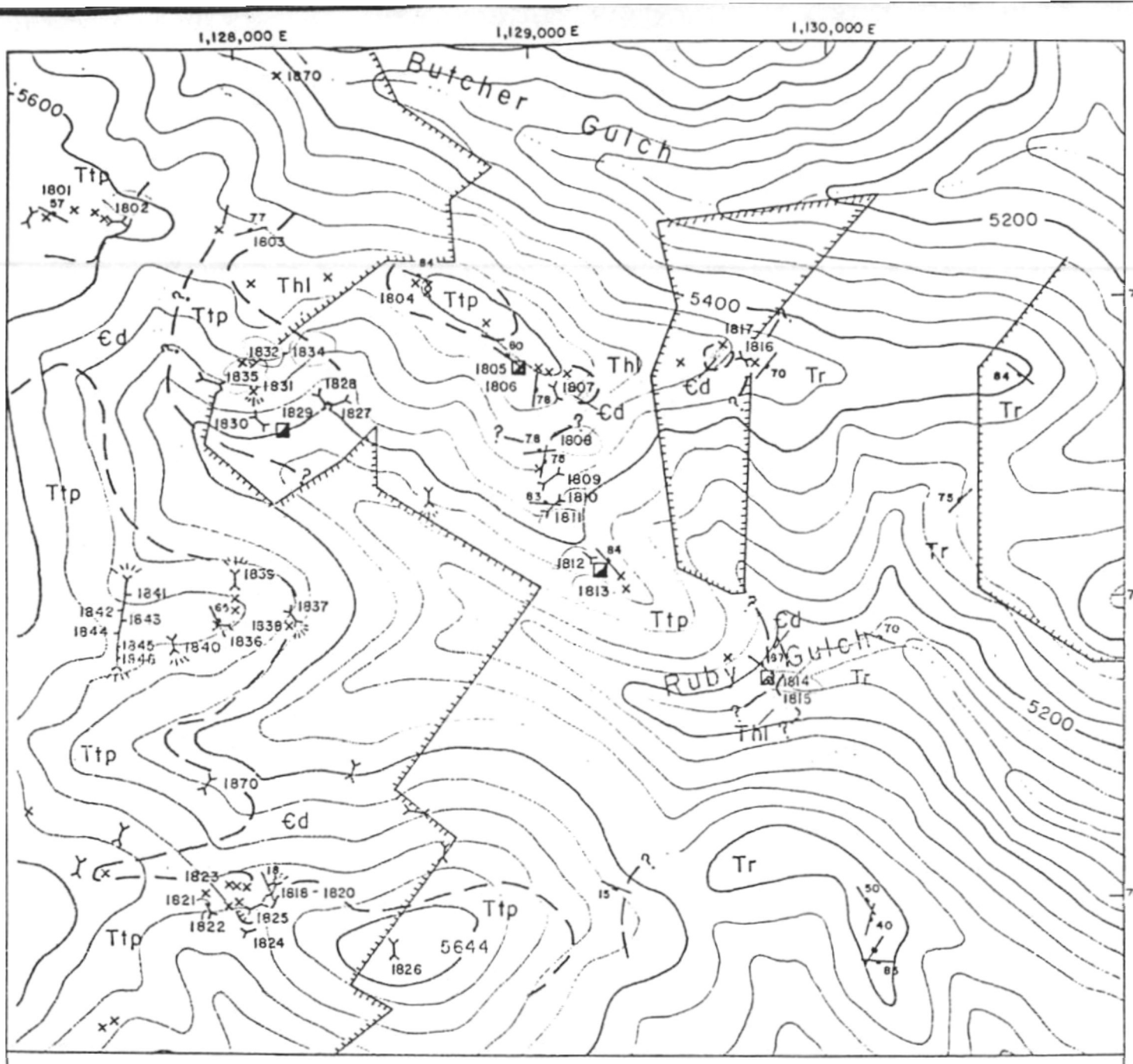
Table 5

UNION HILL AREA ROCK SAMPLES

Sample #	Strawberry Hill Assay (oz/ton) Au	Ag	Bondar-Clegg Assay (oz/ton) Au	Ag	ROCK TYPE	KIND OF SAMPLE
1847	.010	NF			Ttp	10' subcrop
1848	.010	NF			Ttp	10' subcrop/rubble
1849	tr	NF			Ttp	10' subcrop/rubble
1850	tr	NF			Ttp	10' subcrop/rubble
1851	.015	NF			Thd?	5' chip
1852	.025	NF	.028	.70	Gdq	10' chip
1853	.020	NF	.005	.17	Gdq+Tr	rubble composite
1854	.035	.460	.029	1.07	Gdq+Tr	4' chip
1855	.010	NF			Thd	10' chip
1856	.030	NF	.033	.26	Gdq	10' chip
1857	.020	NF	.007	.12	Gdq	10' chip
1858	.020	.150	.023	.20	Gdq	10' chip
1859	.005	NF			Gdq	5' chip

Explanation

NF - none found
tr - trace
bxn - breccia
Tr - Tertiary rhyolite
Ttp - Tertiary trachyte porphyry
Tsrp - Tertiary sanidine rhyolite porphyry
Thl - Tertiary hornblende latite
Thd - Tertiary hornblende diorite
Gd - Cambrian Deadwood, q=quartzite, s=shale
pG - preCambrian metamorphics



EXPLANATION

- Tr — Rhyolite
- Ttp — Trachyte porphyry
- Thl — Hornblende latite
- Cd — Deadwood Fm.
- Approximate contact
- 50 — Strike and dip of joint
- 18 — Strike and dip of bed
- Shaft
- Adit
- Prospect pit
- Trench
- Land controlled by Lacana

Anomalous rock samples	oz/ton Au (averaged)
1802	.015
1806	.064
1810	.043
1811	.041
1812	.142
1813	2.159
1814	.027
1815	.029
1818	.017
1832	.134
1833	.029
1834	.020
1835	.020

See Table 6 for additional sample values.

0 250 500 feet
Scale

N

FIGURE 3

LACANA

GILT EDGE INC.

GEOLOGIC MAP
showing
ROCK SAMPLE LOCATIONS
EAST GILT EDGE - UPPER RUBY GULCH AREA

Date: April 1985	Data by: CHC	Drawn by: PYC

Table 6

EAST GILT EDGE-UPPER RUBY CREEK ROCK SAMPLES

Sample #	Strawberry Hill Assay (oz/ton) Au	Ag	Bondar-Clegg Assay (oz/ton) Au	Ag	ROCK TYPE	KIND OF SAMPLE
1801	.010	NF			Ttp	chip composite
1802	.025	NF	.004	.07	Ttp	dump composite
1803	.015	NF			Ttp	10' chip
1804	tr	NF			Ttp	dump composite
1805	NF	NF			Thl	5' chip
1806	.085	NF	.042	.15	Thl	dump composite
1807	NF	NF			Thl	5' chip
1808	NF	NF			Ttp	5' chip
1809	NF	NF			Ttp	5' chip
1810	.050	.160	.035	.33	Ttp?	10' chip
1811	.050	.020	.031	.12	Ttp	5' chip
1812	.145	.335	.138	.41	Ttp	8' chip
1813	2.16	1.69	2.158	2.04	Ttp	dump grab
1814	.045	NF	.008	.02	Ttp+Thl	dump grab
1815	.030	NF	.028	.05	Ɛdq	5' chip
1816	NF	NF			Ɛd	5' chip
1817	NF	NF			Ɛd+Thl	10' chip
1818	.014	tr	.014	.03	bxa	10' chip
1819	NF	NF			bxa	10' chip
1820	.010	NF			bxa	rubble grab
1821	.005	tr			Ttp+Tr	5' chip
1822	.003	NF			Ttp	10' chip
1823	tr	NF			Ttp	10' chip
1824	NF	NF			Ttp	10' chip
1825	.010	NF			bxa	rubble grab
1826	.010	NF			Ttp	5' chip
1827	tr	NF			Thl?	6' chip
1828	.005	NF			Ttp	chip?
1829	.010	NF			Ttp	5' dump channel
1830	.005	NF			Ttp	20' composite rubble
1831	.005	NF			Ttp	trench rubble grab
1832	.125	.11	.142	.29	Ttp	10' chip
1833	.030	NF	.028	.25	Ttp	10' chip
1834	.035	NF	.003	.24	Ttp	10' chip
1835	.025	.11	.014	.16	Ttp	15' composite rubble

Explanation

NF - none found
tr - trace
bxa - breccia
Tr - Tertiary rhyolite
Ttp - Tertiary trachyte porphyry
Tsrp - Tertiary sanidine rhyolite porphyry
Thl - Tertiary hornblende latite
Thd - Tertiary hornblende diorite
Ɛd - Cambrian Deadwood, q=quartzite, s=shale
pЄ - preCambrian metamorphics

Table 6
East Gilt Edge-Upper Ruby Creek Rock Samples
Page 2

Sample #	Strawberry Hill Assay (oz/ton) Au	Ag	Bondar-Clegg Assay (oz/ton) Au	Ag	ROCK TYPE	KIND OF SAMPLE
1836	.010	NF			Ttp	5' chip
1837	.015	NF			Ttp	composite trench rubble
1838	NF	NF			Ttp	composite pit rubble
1839	tr	NF			Ttp	20' composite rubble
1840	.005	NF			Ttp	15' composite rubble
1841	NF	NF			Ttp	10' subcrop/rubble
1842	tr	NF			Ttp+Tsrp	10' subcrop/rubble
1843	.005	NF			Ttp	10' subcrop/rubble
1844	.005	NF			Ttp	10' subcrop/rubble
1845	.010	NF			Ttp	10' subcrop/rubble
1846	.005	NF			Ttp+Thl?	10' subcrop/rubble
1870	NF	NF			Thl	7' subcrop

Explanation

NF - none found
tr - trace
bxa - breccia
Tr - Tertiary rhyolite
Ttp - Tertiary trachyte porphyry
Tsrp - Tertiary sanidine rhyolite porphyry
Thl - Tertiary hornblende latite
Thd - Tertiary hornblende diorite
Ed - Cambrian Deadwood, q=quartzite, s=shale
pE - preCambrian metamorphics

of at least 75 ft, and one shaft is caved at 40 ft. An open adit that strikes N40°W is located near one of the shafts. These workings could be explored with the proper equipment, but initial sampling was limited to accessible surface and dump samples. Dump sample 1813 assayed 2.16 oz/ton gold, and an eight foot chip sample from the portal of the adjacent adit averaged 0.142 oz/ton. Both samples are fractured, siliceous trachyte, and the chip sample has up to 2% disseminated pyrite. The principal joint set at the portal strikes N40°W and dips 84°NE. Samples 1810 and 1811 are chip samples from a 45 ft trench that is 250 ft northwest from the adit along the ridge. They averaged 0.043 and 0.041 oz/ton gold, respectively. Two inches of gouge is present on a N85°W, 83°N fracture. A caved shaft is present on the Cooper claim near Ruby Creek. Gouge was noted on a couple of fractures, and a N2°W, 40°E structure appears to be a fault contact when viewed from across the shaft.

The workings on the Portland claim consist of a caved shaft, several small pits, and a large pit. Samples 1832-4 were collected from a 20 ft diameter, 15-30 ft deep pit. The averaged gold assays in ounces per ton for the three 10 ft chip samples are as follows: 1832 - 0.134, 1833 - 0.027, 1834 - 0.020. A narrow shear zone (N20°E, vertical) bisects the pit. Samples 1832 and 1833 were taken across the structure and include adjacent fractured trachyte. The sample from the west side of the pit, 1834, does not transect the structure. A 70 ft long trench that trends N70°W was dug 80 ft southwest of the pit. A 15 ft composite rubble sample from the trench averaged 0.020 oz/ton gold.

Eight hundred feet south of the Portland workings is a group of trenches in the trachyte porphyry near the contact with the Deadwood Formation. The trachyte is sheared and silicified in places, and in some rocks the feldspars and the matrix are argillically altered. Eleven samples, 1836-41, were collected from the area (table 6). Assay results from these samples do not indicate enrichment of gold or silver.

The Golden Breccia claim was staked on the saddle between the North Gilt Edge stock and Hill 5644 to the east in August 1983. The claim is invalid as it overstakes existing Lacana-controlled claims. Several trenches and pits expose a breccia zone near the obscured contact between the trachyte porphyry and the Deadwood Formation. Breccia fragments are up to 6 in., and small quartz veinlets are common in the fractured rock. Fractures are stained with iron oxide, and some of the rocks have 1% pyrite. Two small tunnels are present in the area--both are caved at the portal. One strikes N40°W and the other strikes N80°E. Samples 1818-25 had surprisingly low values for gold and silver. The maximum averaged value was 0.017 oz/ton gold for a 10 ft chip sample, but the rest of the samples assayed <0.01 (table 6).

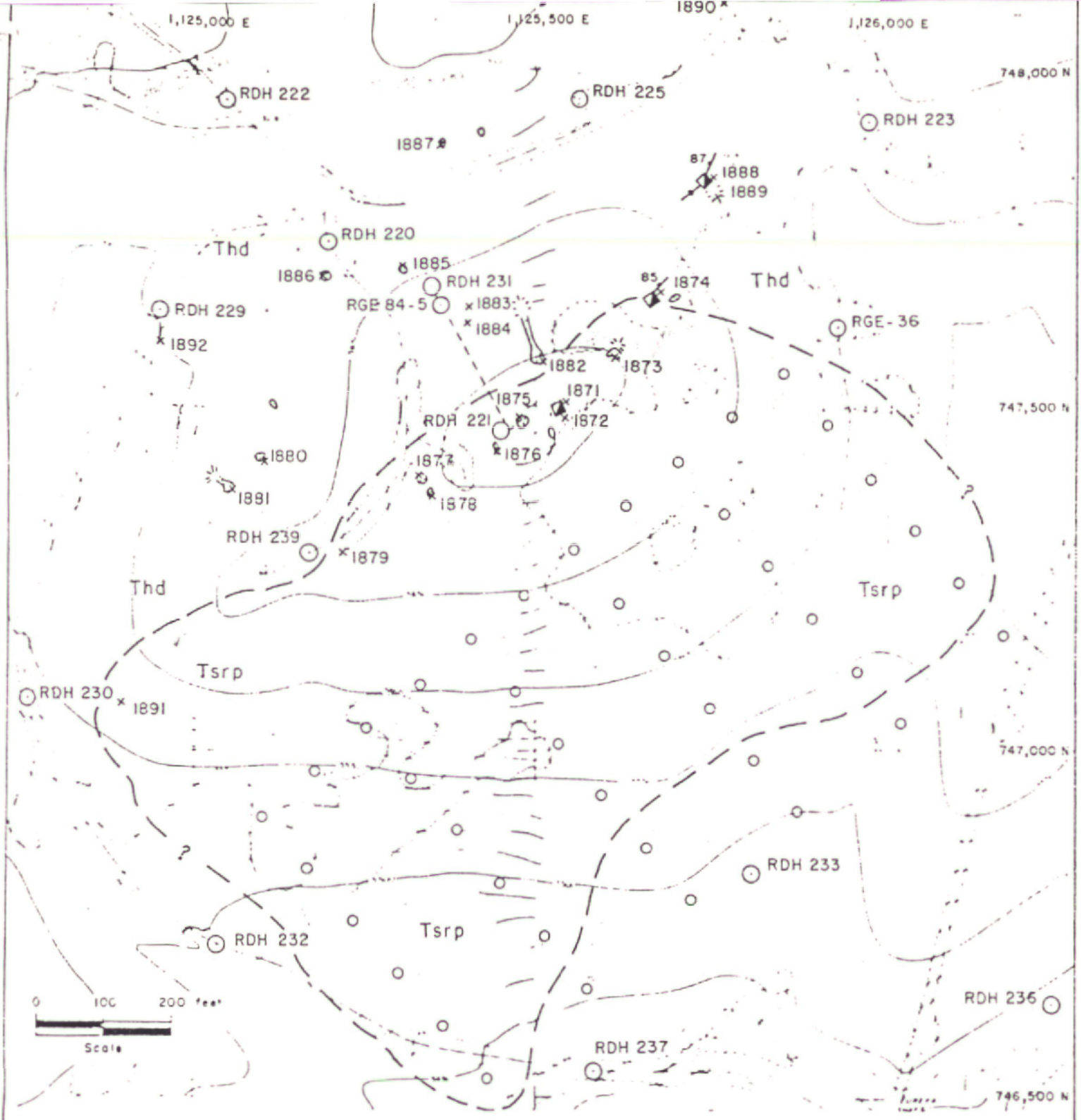
Anchor Hill

Anchor Hill is underlain by an irregular oblate stock of sanidine rhyolite porphyry that intruded the older Tertiary hornblende diorite (fig. 4). The hill has been heavily prospected by early-day workers. Development work includes several pits and trenches, three shafts, and an adit. Production from these workings is not known. Mineralization is localized at the contact between the sanidine rhyolite and the hornblende diorite. Magnetic disturbances were noted in a couple of places on the east side of Anchor Hill. Twenty-two rock samples were collected during the 1984 program (table 7). The highest averaged value is 0.081 oz/ton gold, and is a composite rubble sample of hornblende diorite from a small pit. A 10 ft chip sample in the sanidine rhyolite porphyry averaged 0.034 oz/ton gold. Reverse circulation drill hole RGE 84-5 was angled toward the contact, and it passes beneath these two sample locations. The interval at the bottom of the hole, from 284 to 295 ft was the only interval with ore grade mineralization. It averaged 0.024 oz/ton gold.

The hill slope on the southeast side of Anchor Hill is soil covered and has poor outcrop exposure, so a soil sample grid was utilized to test for gold mineralization. The base line on the Anchor Hill soil grid, strikes N50°E, and perpendicular lines are 200 ft apart. Sample spacing is 100 ft. Rock chips in the sample holes indicate that the area is underlain by sanidine rhyolite porphyry and hornblende diorite. The mean of the soil gold values (table 1) is 88 ppb. This is considerably less than the 221 ppb mean for the East Gilt Edge grid, and strong enrichment of gold is not indicated. Only one sample is greater than the threshold value for the grid (table 8). Contoured gold values are shown on Figure 5.

West of Strawberry Creek

A portion of the area west of Strawberry Creek was traversed, and 24 samples were collected (fig. 6). The predominate lithology of the area is hornblende diorite, and later intrusive bodies of trachyte porphyry and sanidine rhyolite porphyry ore located near Strawberry Creek. Several irregular roof pendants of Deadwood Formation are also present in the area. A zone of strong brecciation is evident at MacLeod's adit. Contacts are difficult to trace on the soil covered slopes around the trachyte and sanidine rhyolite porphyries. Four of the samples had anomalous values (table 9), however, the trachyte lacks the pervasive fracturing and iron-staining common in the main Gilt Edge area, and it appears to have limited potential for economic, leachable mineralization.



EXPLANATION

- Tsrp — Sanidine rhyolite porphyry
- Thd — Hornblende diorite
- Approximate contact
- Shaft
- Prospect pit
- Strike and dip of joint
- Rock sample location
- Soil sample location
- RDH 221 — Drill hole location showing projection

Anomalous Samples	oz/ton Au (averaged)
1871	.033
1872	.015
1873	.022
1875	.034
1878	.033
1880	.023
1881	.015
1884	.081
1891	.026

See Table 7 for additional sample values.

FIGURE 4

LACANA

GILT EDGE INC

GEOLOGIC MAP
showing
SAMPLE LOCATIONS
ANCHOR HILL AREA

Date: April 1985	Data by: CHC	Drawn by: PYC

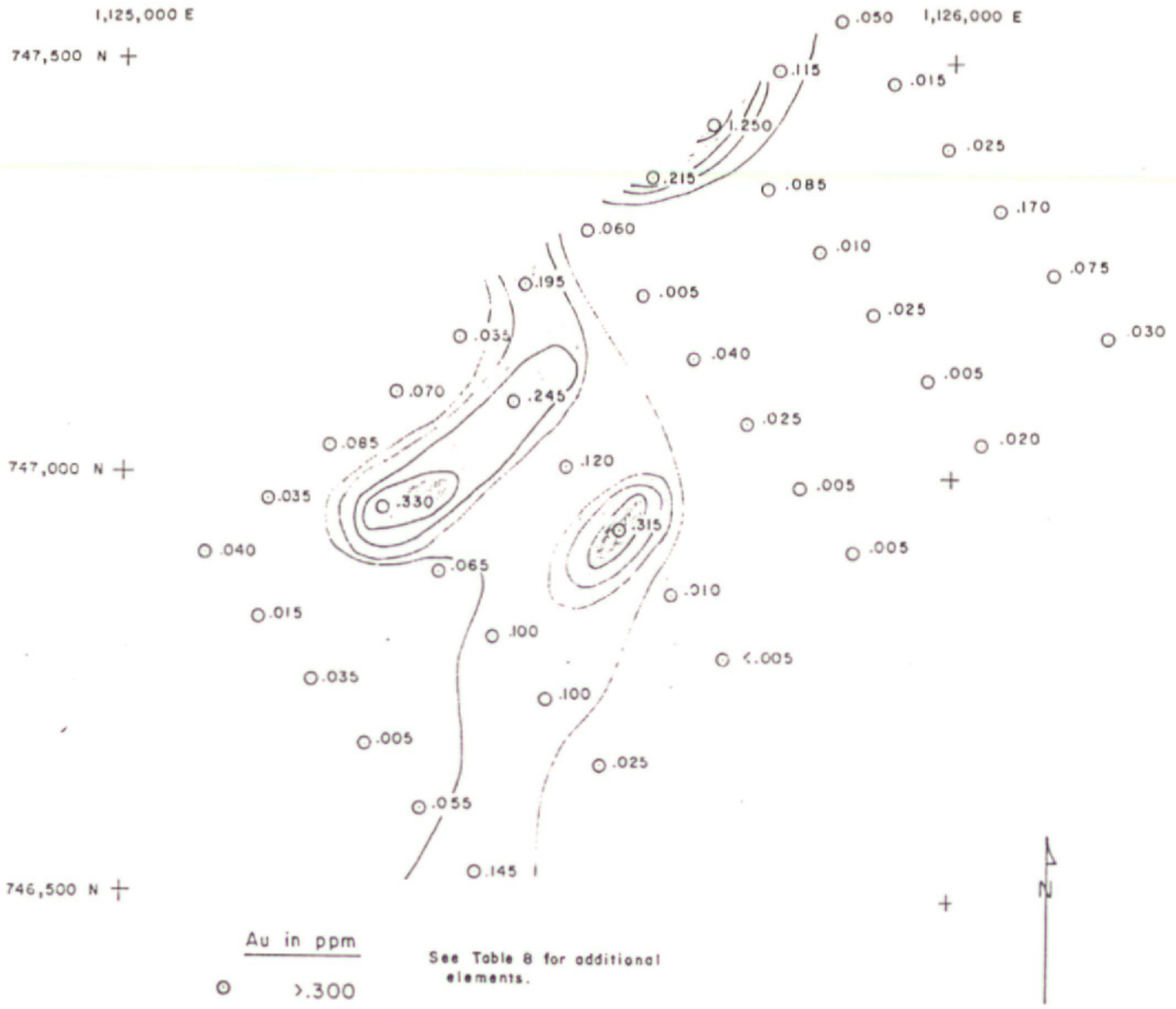
Table 7

ANCHOR HILL AREA ROCK SAMPLES

Sample #	Strawberry Hill Assay (oz/ton) Au	Ag	Bondar-Clegg Assay (oz/ton) Au	Ag	ROCK TYPE	KIND OF SAMPLE
1871	.035	NF	.030	.05	Tsrp	3' chip
1872	.015	NF			Tsrp	6' dump composite
1873	.020	NF	.024	.11	Tsrp	10' chip
1874	.010	NF			Tsrp+Thd+Ttp?	8' dump composite
1875	.035	NF	.033	.05	Tsrp	10' chip
1876	.010	.030			Tsrp	10' subcrop
1877	.010	.020			Tsrp	4' chip
1878	.035	NF	.030	.13	Tsrp	rubble composite
1879	.005	.055			Tsrp	10' chip
1880	.025	1.415	.020	.08	Thd+Cds	rubble composite
1881	.015	tr			Tr?	10' chip
1882	.010	NF			Thd	10' chip
1883	.005	NF			Thd	rubble composite
1884	.065	NF	.097	.13	Thd	rubble composite
1885	.005	NF			Tsrp+Thd	rubble composite
1886	NF	NF			Thd+Tr?	rubble composite
1887	.005	NF			Tsrp?	8' subcrop
1888	.01	NF			Thd	dump composite
1889	tr	NF			Thd	10' dump composite
1890	.005	NF			Thd	10' chip
1891	.015	.040			Tsrp	10' subcrop
1892	tr	NF			Thd	10' subcrop

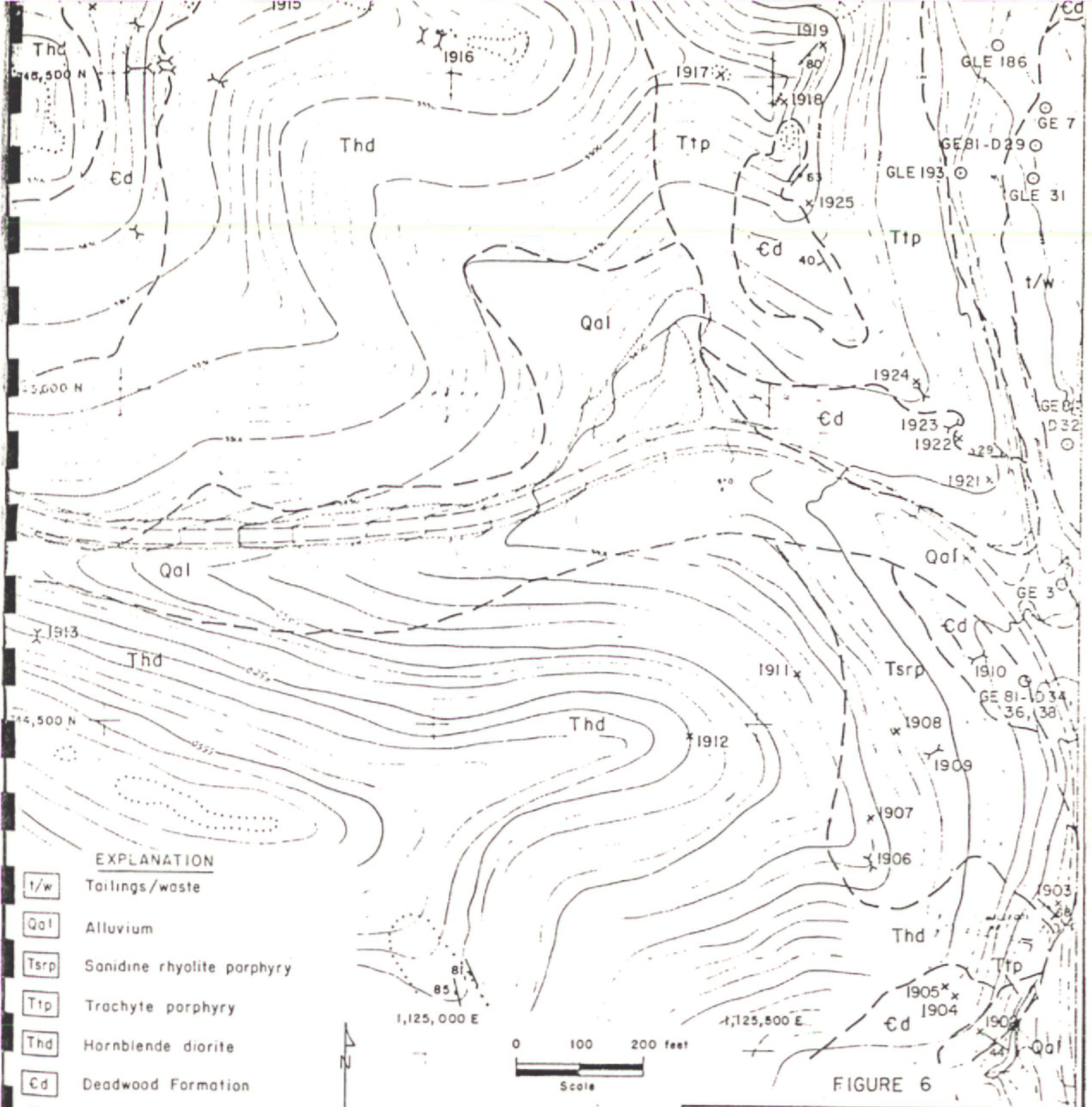
Explanation

NF - none found
tr - trace
bxa - breccia
Tr - Tertiary rhyolite
Ttp - Tertiary trachyte porphyry
Tsrp - Tertiary sanidine rhyolite porphyry
Thl - Tertiary hornblende latite
Thd - Tertiary hornblende diorite
Cd - Cambrian Deadwood, q=quartzite, s=shale
pC - preCambrian metamorphics



ANCHOR HILL
Soil Grid

FIGURE 5



EXPLANATION

- t/w — Tailings/waste
- Qal — Alluvium
- Tsrp — Sanidine rhyolite porphyry
- Ttp — Trachyte porphyry
- Thd — Hornblende diorite
- Cd — Deadwood Formation
- Outcrop
- Approximate contact
- 40 — Strike and dip of bed
- 80 — Strike and dip of joint
- 29 — Foliation attitude
- Trench
- 1915 — Rock sample location
- GE 7 — Drill hole location

Anomalous Samples	oz/ton Au (averaged)
1902	.029
1907	.035
1914	.090
1923	.060

See Table 9 for additional sample values.

FIGURE 6

LACANA

GILT EDGE INC.

GEOLOGIC MAP
showing
ROCK SAMPLE LOCATIONS
WEST OF STRAWBERRY CREEK

Date: April 1985 | Data by CHC, RJM | Drawn by: PYC

Table 8

ANCHOR HILL SOIL SAMPLES

Sample Number	ELEMENT UNITS	Ag PPM	Au PPB
B0+00		0.3	40
B0+10S		0.3	15
B0+20S		0.3	35
B0+30S		0.4	5
B0+40S		0.5	55
B0+50S		0.5	145
B1+00		<0.2	35
B2+00		0.2	85
B2+10S		0.4	220
B2+20S		0.4	65
B2+30S		0.3	100
B2+40S		0.6	100
B2+50S		<0.2	25
B3+00		0.2	70
B4+00		0.7	35
B4+10S		0.6	245
B4+20S		0.4	120
B4+30S		0.3	315
B4+40S		<0.2	10
B4+50S		0.4	<5
B5+00		0.5	195
B6+00		0.4	60
B6+10S		0.3	5
B6+20S		0.4	40
B6+30S		0.3	25
B6+40S		0.2	5
B6+50S		0.3	5
B7+00		0.5	215
B8+00		0.7	730
B8+10S		0.5	85
B8+20S		0.3	10
B8+30S		0.4	25
B8+40S		0.5	5
B8+50S		0.6	20
B9+00		0.6	115
B10+00		0.7	50
B10+10S		0.3	15
B10+20S		0.4	25
B10+30S		0.5	170
B10+40S		0.7	75
B10+50S		0.2	30

Table 9

ROCK SAMPLES WEST OF STRAWBERRY CREEK

Sample #	Strawberry Hill Assay (oz/ton) Au	Ag	Bondar-Clegg Assay (oz/ton) Au	Ag	ROCK TYPE	KIND OF SAMPLE
1902	.025	NF	.032	.09	Ꞩdq+Ttp	8' chip
1903	NF	.05			Tsrp	10' chip
1904	.005	NF			Tsrp?	10' chip
1905	tr	NF			Tsrp?	10' chip
1906	.015	.33			Tsrp	6' chip
1907	.035	.315			Tsrp	10' rubble composite
1908	tr	tr			Tsrp	10' chip
1909	.005	NF			Tsrp	10' rubble
1910	.010	tr			Ꞩdq	10' rubble
1911	.005	NF			Thd	10' dump composite
1912	tr	NF			Thd	6' chip
1913	tr	NF			Thd	rubble grab
1914	.090	.43			Ꞩdq	10' dump composite
1915	.005	NF			Thd	10' rubble composite
1916	NF	NF			Thd	10' composite rubble
1917	.005	NF			Ttp	composite rubble grab
1918	.010	NF			Ttp	10' outcrop/subcrop chip
1919	tr	NF			Ttp	10' chip
1920	tr	NF			Ttp	10' subcrop/float
1921	.015	tr			Ꞩdq	8' subcrop
1922	.015	tr			Ttp?	12' subcrop
1923	.060	.01			Ꞩds	10' chip/subcrop
1924	NF	tr			Ttp	6' subcrop
1925	.005	.06			Ttp	10' chip

Explanation

NF - none found
tr - trace
bxa - breccia
Tr - Tertiary rhyolite
Ttp - Tertiary trachyte porphyry
Tsrp - Tertiary sanidine rhyolite porphyry
Thl - Tertiary hornblende latite
Thd - Tertiary hornblende diorite
Ꞩd - Cambrian Deadwood, q=quartzite, s=shale
pꞨ - preCambrian metamorphics

Zelda Claims

Nine samples, 1932-40, were collected on and near the Zelda claims in sections 11 and 12, T4N, R3E, at the extreme west of the Lacana-controlled block. Only a couple of hours were spent examining these claims and much of the area remains unexplored. The area consists of Precambrian schists and quartzites that are unconformably overlain by Cambrian shales and sandstones. Small quartz veinlets crosscut the foliation in some rocks, however, the larger quartz segregations and veins are generally conformable. The white, vitreous quartz is fractured and iron-stained in places. Iron staining ranges from moderate to pervasive in the sediments and the metamorphics.

Several old trenches and pits are located in a steep-sided gully (fig. 7), and a small adit is located just east of the highway. The samples were collected from these diggings and from outcrops. None of the samples had anomalous gold or silver values (table 10).

Conclusions

The 1984 Gilt Edge reconnaissance program located ore grade mineralization and delineated areas where additional work is warranted. Soil sampling appears to be a viable exploration technique in the area, however, subsequent drilling on the East Gilt Edge soil grid suggests that soil anomalies may be due to low grade sulfide mineralization. Additional rock sampling in the gully east of the Ora Bella is needed to determine the extent and character of the mineralization near the contact of the trachyte porphyry with the Cambrian and Precambrian units.

Favorable geology and good assay results indicate that Upper Ruby Gulch has good potential for economic mineralization. Contacts should be mapped, and claim corners located. Underground workings need to be mapped and sampled, however, many of the workings are on claims that are not controlled by Lacana. Land owners should be contacted to see if they are willing to work out a deal. The Butcher Gulch drainage has not been examined so a few days of mapping and prospecting is needed in the area.

The hornblende diorite porphyry is not as favorable a host rock as the trachyte porphyry unit, so the area west of Strawberry Creek may not host Gilt Edge type mineralization. Traverses in 1984 covered only a small portion of the area, and much land has not been examined. Numerous old diggings and workings are located in the area, and they should be mapped and sampled. This is a large area, and sufficient time should be allocated to do an adequate evaluation.

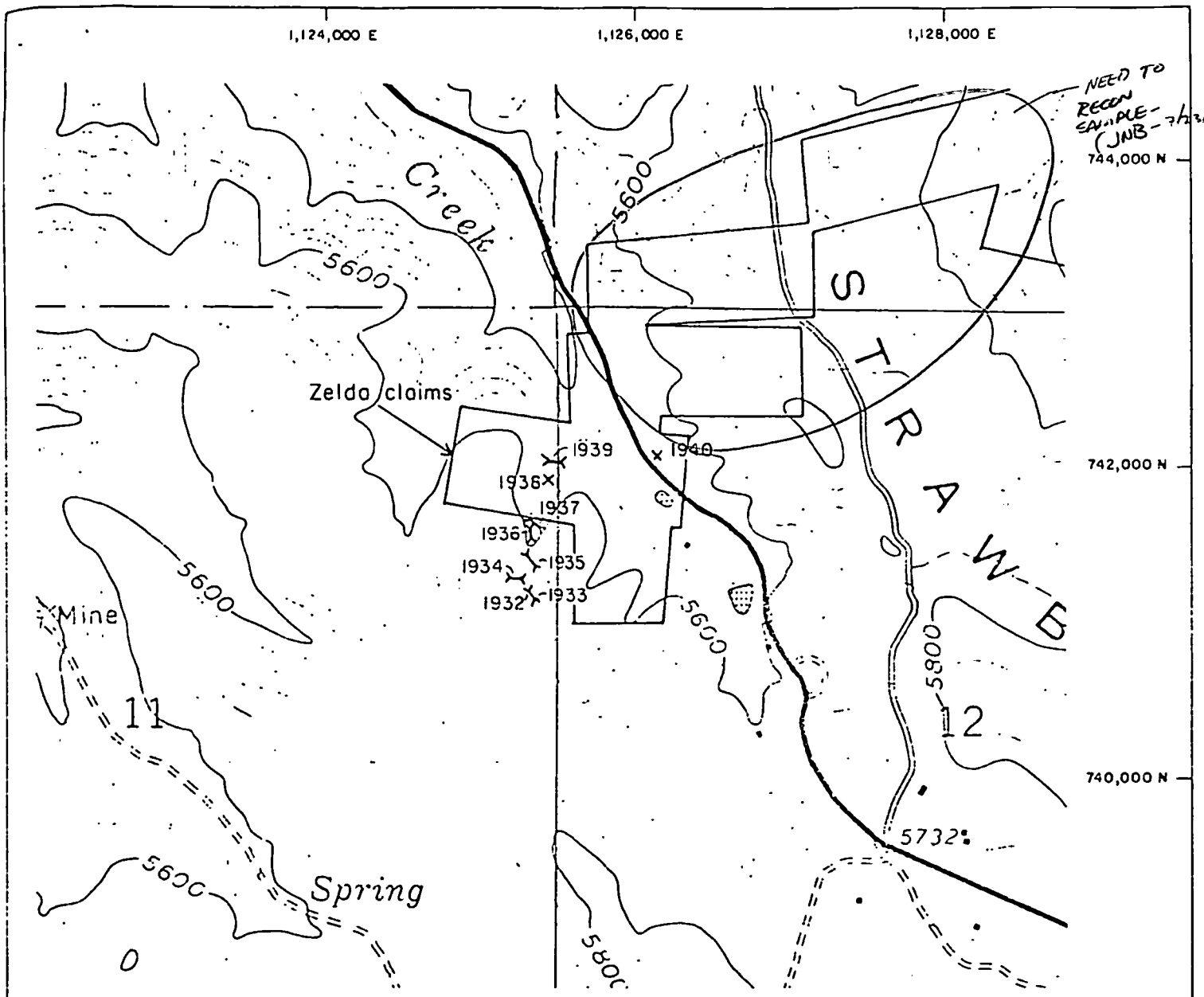


FIGURE 7

LACANA

GILT EDGE INC.

ROCK SAMPLE LOCATION MAP

ZELDA CLAIMS

Date: April 1985	Data by: CHC	Drawn by: PYC

Table 10

ZELDA CLAIMS ROCK SAMPLES

Sample #	Strawberry Hill Assay (oz/ton) Au	Ag	Sondar-Clegg Assay (oz/ton) Au	Ag	ROCK TYPE	KIND OF SAMPLE
1932	.005	NF			Ꞩd	3' chip
1933	tr	NF			Ꞩdq	4' chip
1934	.005	NF			Thl?	3' chip
1935	NF	NF			pꞨ?	5' chip
1936	tr	NF			pꞨ?	rubble grab
1937	tr	tr			Ꞩdq	3' subcrop
1938	tr	NF			vein quartz	3' chip
1939	tr	NF			pꞨ?	2' subcrop
1940	.005	NF			vein quartz	chip

Explanation

NF - none found
tr - trace
bxa - breccia
Tr - Tertiary rhyolite
Ttp - Tertiary trachyte porphyry
Tsrp - Tertiary sanidine rhyolite porphyry
Thl - Tertiary hornblende latite
Thd - Tertiary hornblende diorite
Ꞩd - Cambrian Deadwood, q=quartzite, s=shale
pꞨ - preCambrian metamorphics

Appendix I

ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD
Cu	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption
Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption
Ag	.2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption
Au	5 PPB	AQUA REGIA	Fire Assay aa
Bi	1 PPM	HNO3	Atomic Absorption
As	2 PPM	NITRIC PERCHLOR DIG	Colourimetric
Hg	5 PPB	CONTROLLED AQ. REGIA	Cold Vapour AA
Te	.2 PPM	HBr-Br2-MIBK	Atomic Absorption
Sb	1 PPM		X-ray Fluorescence

DRY, SEIVE -80

TABLE 1

PROPOSED EXPLORATION TARGETS - GILT EDGE PROJECT

(1)

AREA/TARGET	PRIORITY	GOLD MINERALIZATION TARGET	GEOLOGIC BASIS	PROPOSED EVALUATION
DEEP SULFIDE TARGET	1	Trachyte Porphyry primary host rock, with faulted, brecciated Quartz Trachyte Porphyry, Deadwood Fm. and pE rocks as secondary host rocks.	Highest grade gold ore and most intense alteration is developed in highly brecciated Trachyte Porphyry marginal to Quartz Trachyte stocks and plugs and in wide fracture zones (up to 200') trending NE and NW. Ore zones in these highly fractured rocks are open at depth. Very good potential for development of 60 MMT+ of sulfide ore at .04-.05 OPT Au.	Deep exploration/development drilling program proposed and initiated. Thirteen rotary holes drilled to date with encouraging results received to date. Drilling program currently on hold - awaiting project financing. Phase I of the program was $1.6 MM in order to obtain 200x200 feet centers. A second phase of infill drilling based on Phase I results may be necessary to formulate proven/probable reserves.
NORTH STRAWBERRY		Cambrian Deadwood Fm. primary host rock - Strataform and fault-controlled gold mineralization.	Ore-grade gold mineralization developed in in basal quartzite and calcareous shale units lateral to North-trending faults. Mineralization is both strataform and fault-controlled and generally within 400' of surface. Ore is mostly sulfide. Present drill-indicated and inferred reserves calculated of 3.18 MMT @ .044 OPT with geologic potential of an additional 9.8 MMT at an estimated grade of .04 OPT Au. Gold mineralization up to 125' of .201 OPT Au in highly faulted areas.	Most of drill indicated reserves are present below leach pad. Therefore, infill drilling of this area is not planned at this time. Drilling of geologic potential to west of leach pad is combined with proposed Anchor Hill/North Strawberry infill/exploration drilling program of 40 drill holes (see below).
ANCHOR HILL/ NORTH STRAWBERRY	2	Cambrian Deadwood Fm. primary host rock, with faulted Quartz Trachyte Porphyry of Anchor Hill stock as secondary host. Deadwood Fm. breccia marginal to Anchor Hill stock; strataform and fault-controlled gold mineralization	Limited drilling south of Anchor Hill stock indicates Deadwood Fm.-hosted gold mineralization generally less than 250' in depth. Up to 55' thick drill intercepts averaging .037-.051 OPT Au present. Strong NE trending gold geochem anomaly with indications of intersection with NW mineralized trend extending from Hoodoo mine through Union Hill stock to plant site at south end of Anchor Hill. As in the Dakota Maid area, brecciated Deadwood Fm. marginal to the Anchor Hill stock and fault-controlled plus strataform replacement mineralization west of the leach pad in areas of drill indicated reserves are primary targets for proposed drilling program. The Anchor Hill quartz trachyte porphyry contains oxidized and mixed oxide plus sulfide gold mineralization in all three holes drilled in it thus far. The two vertical holes contain 110' and 185' of continuous gold mineralization averaging .046 and .029 OPT Au respectively above depths of 475'.	40 hole rotary drilling program on approximate 200x200 foot spacing proposed in order to test the continuity of geologic potential identified west of drill-indicated and inferred reserves under leach pad in Deadwood Fm. The proposed drilling is also formulated to test potential for brecciated, Deadwood-hosted gold mineralization marginal to the Anchor Hill stock as well as quartz trachyte-hosted gold mineralization at the margin and at sites of gold anomalies along inferred structures. Proposed program: Hole locations shown on 1"=100' scale map. 16,000 feet rotary drilling Total Cost = Approximately # 320,000.00 Drilling start-up, based on rig availability, could begin immediately in eastern portion of target area.

TABLE 1

PROPOSED EXPLORATION TARGETS - GILT EDGE PROJECT

AREA/TARGET	PRIORITY	GOLD MINERALIZATION TARGET	GEOLOGIC BASIS	PROPOSED EVALUATION
LANGLEY TARGET	3	Trachyte Porphyry, Deadwood Fm. and pC Rocks, At the brecciated and faulted margin of the Langley quartz trachyte porphyry stock.	Economic oxide and sulfide gold mineralization is now being developed marginal to the Union Hill quartz trachyte porphyry stock to the north. Gradex thickness relationships display a remarkable aureole around the Union Hill stock margin which is also the source for previously mined high-grade gold ores. Past limited drilling is restricted to the northern margin of the Langley stock. However this drilling indicates not only shallow, oxide, ore grade gold mineralization, but some of the richest and most continuous gold intercepts drilled on the Gilt Edge property to date, e.g., deep core holes containing 400' to 580' averaging +.08 OPT Au as deep as 1400'. Surface sampling along the eastern, southern and western margins of the Langley stock shows a gold halo similar to the gradex thickness halo surrounding the Union Hill stock, with pods of +.030 OPT Au surrounding the Langley stock. One surface sample was as high as .222 OPT Au. Thus is a previously undrilled area which begs for exploration drilling in order to make additions to both near-surface oxidized ore and sulfide ore at depth. Favorable areas of mapped brecciation are present at the surface as well as northeast trending fault zone from the Oro Fino shaft on the south to the Hoodoo shaft on the north, along which fault breccia has been mapped.	A drilling program has not been laid out for this area as yet. However, an initial 10-12 drill hole program consisting of both angle and vertical rotary drill holes located in areas of highest surface sample results and mapped zones of brecciation could be formulated and initiated to coincide with the proposed North Strawberry/Anchor Hill drilling program. If results justified further exploration, a second phase of exploration would be formulated. Proposed Program: 6,000 feet of rotary drilling Est. Total Cost = #120,000.00

TABLE 1

PROPOSED EXPLORATION TARGETS - GILT EDGE PROJECT

AREA/TARGET	PRIORITY	GOLD MINERALIZATION TARGET	GEOLOGIC BASIS	PROPOSED EVALUATION
LANGLEY EXTENSION	4	Cambrian Deadwood Fm., Trachyte Porphyry and pE Rocks. Highly faulted and fractured rocks in which strataform (Deadwood) and fault-controlled gold mineralization in all three rock types may possibly add to present reserves and contribute to maintaining a lower stripping ratio for the Deep Sulfide Target in the main mine area.	A major fault zone trending North from the western margin of the Langley stock to the plant site area is present. Trachyte porphyry is indruded along and within the fault zone and spreads out as a sill-like mass west of Strawberry Creek. Faulted Deadwood and pE rocks are also present and form the basis for possible strataform and fault-controlled mineralization. Several +.030 OPT Au surface samples outline this fault zone. However no drilling has occurred along the trace of this favorable fault zone. Four surface samples exceed .10 OPT Au, one of these is 1.9 OPT Au.	Conduct ~~in~~ in-fill surface sampling and more detailed geologic mapping of this zone west of the Dakota Maid oxide pit in order to better identify possible follow-up drill sites.
HOODOO TARGET	5	Trachyte Porphyry, Deadwood Fm., pE Rocks. Faulted-controlled mineralization in trachyte porphyry, Deadwood Fm. and along the trachyte-pE contact zone. Ore additions here, like the Langley Extension, would contribute to lowering the stripping ratio for the Deep Sulfide Target in the main mine area.	(200x200') Widely-spaced condemnation drilling conducted during 1987 in this area showed the presence of low to high-grade gold intercepts along a NW trending mineralized fault zone extending from this area toward Anchor Hill, essentially open at both ends. Mineralized drill intercepts range in depth from the surface to 600', in thickness from 5 to 215', and in grade ranging above a cutoff of .02 OPT to 75' averaging .149 OPT.	Conduct in-fill surface sampling more detailed geologic mapping in order to identify more refined drilling targets. This work is aimed at defining up-dip extensions of fault-controlled gold mineralization in order to define ore contributions in this area now considered as waste in the Deep Sulfide Target area.

Following Targets are undrilled in which only cursory surface sampling/mapping has been conducted

TABLE II

PROPOSED EXPLORATION TARGETS - GILT EDGE PROJECT
GRASS ROOTS TARGETS DISTAL TO MAIN MINE AREA

AREA/TARGET	PRIORITY	GOLD MINERALIZATION TARGET	GEOLOGIC BASIS	PROPOSED EVALUATION
NORTH STRAWBERRY EXTENSION		Deadwood Fm. Oxide + sulfide gold mineralization	Northward Extension of North and NE structures responsible for mineralization identified in the North Strawberry and Anchor Hill targets coincide in this AREA. Cursory surface sampling in this AREA identifies AN zone of +.030 OPT Au. Strong surface alteration has also been identified by Dick Nielsen in mapping conducted last fall. Oxide as well as sulfide gold mineralization is possible in this AREA, possibly as stratiform bodies within the Deadwood Fm.	Surface sampling and geologic mapping to identify drilling targets.
Rattlesnake Extension, Ruby Ridge and Butcher Trends		Trachyte Porphyry and Deadwood Fm. oxide + sulfide gold mineralization	The northern portion of the NE trending Rattlesnake fracture zone is only poorly identified. faults alteration patterns, and surface gold anomalies take on a stronger NW trend in these areas. Cursory sampling shows some areas of +.03 OPT Au anomalies which can now be explored because of recent land acquisitions in those areas.	Surface sampling and geologic mapping to further identify drilling targets
Golden Crest		Deadwood Fm. Stratiform and fault-controlled oxide and sulfide gold mineralization.	Area of unrecorded previous mining northwest of main mine area. ~~Gold Crest~~ is currently poorly understood. This area No sampling or drilling has occurred here in recent history. Although exposures are rare, the Deadwood Fm. is the postulated host for past production. Projection of NW trending structures in main Gilt Edge area coincide with area of Golden Crest. Thermal alteration mapped in this area where Deadwood is	

TABLE 2

PROPOSED EXPLORATION TARGETS - GILT EDGE PROJECT

AREA/TARGET	PRIORITY	GOLD MINERALIZATION TARGET	GEOLOGIC BASIS	PROPOSED EVALUATION
			EXPOSED AS SMALL "WINDOWS" THROUGH HORNBLENDE TRACHYTE SILL.	
HOODOO RIDGE		DEADWOOD FM. AND pE ROCKS. BRECCIATED ROCKS MARGINAL TO THE HOODOO RIDGE QUARTZ TRACHYTE PORPHYRY INTRUSIVE.	TOTALLY UNEXPLORED AREA EAST OF MAIN GILT EDGE AREA. NEWLY ACQUIRED IN 1988, OUR LAND POSITION NOW AFFORDS THE OPPORTUNITY TO EXPLORE DEADWOOD FM. AND pE ROCKS INTRUDED BY THIS NORTHWEST TRENDING FEEDER. STRONG ALTERATION WAS MAPPED BY NIELSEN IN BOTH THE QUARTZ TRACHYTE AND THE DEADWOOD FM. AND pE ROCKS MARGINAL TO THE INTRUSIVE.	SURFACE SAMPLING AND FOLLOW UP GEOLOGIC MAPPING NECESSARY TO & DEFINE DRILLING TARGETS.
GOLDEN CREST EXTENSION		DEADWOOD FM. STRATAFORM AND FAULT CONTROLLED GOLD MINERALIZATION.	· A LARGE AREA OF THERMAL AND HYDROTHERMAL ALTERATION WAS MAPPED BY TOM PATTON LATE LAST YEAR EXTENDING NORTHWEST FROM THE GOLDEN CREST MINE AREA. THE MOST INTENSE ALTERATION WAS SEEN IN DEADWOOD FM. ROCKS EXPOSED IN SMALL "WINDOWS" THROUGH SILLS OF HORNBLENDE TRACHYTE. BECAUSE OF THESE RELATIVELY SMALL AREAS OF EXPOSED DEADWOOD, THE FEW +.030 OPT Au SURFACE SAMPLES ARE RESTRICTED IN THIS AREA. HOWEVER THIS LARGE AREA OF WIDESPREAD ALTERATION AND ANOMALOUS GOLD GEOCHEM DESERVES MUCH MORE ATTENTION IN ORDER TO DEFINE POSSIBLE STRUCTURAL CONTROLS ON MINERALIZATION.	SURFACE SAMPLING AND FOLLOW UP GEOLOGIC MAPPING NECESSARY TO DEFINE DRILLING TARGETS.